

Title (en)  
PORTABLE X-RAY GENERATION DEVICE HAVING ELECTRIC FIELD EMISSION X-RAY SOURCE

Title (de)  
TRAGBARE RÖNTGENSTRAHLERZEUGUNGSVORRICHTUNG MIT RÖNTGENQUELLE MIT ABSTRAHLUNG EINES ELEKTRISCHEN FELDES

Title (fr)  
DISPOSITIF DE GÉNÉRATION DE RAYONS X PORTABLE AYANT UNE SOURCE DE RAYONS X À ÉMISSION DE CHAMP ÉLECTRIQUE

Publication  
**EP 3321951 A4 20190227 (EN)**

Application  
**EP 16818270 A 20160630**

Priority

- KR 20150093293 A 20150630
- KR 20150093282 A 20150630
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Abstract (en)  
[origin: EP3319111A1] Disclosed is a portable X-ray emission device, which uses an electric field emission-type X-ray source, and is thus advantageous in reducing weight and volume and has excellent reliability in X-ray emission performance. The portable X-ray emission device according to the present invention comprises: an electric field emission X-ray source, which includes a cathode electrode having an electron emission source, an anode electrode having an X-ray target surface, and a gate electrode between the cathode electrode and the anode electrode; and a driving signal generation unit for generating at least three driving signals applied to the cathode electrode, the anode electrode, and the gate electrode, respectively, by a direct current power source having a predetermined voltage. The driving signal generation unit may comprise a current control unit for maintaining a tube current between the anode electrode and the cathode electrode to have a constant value during X-ray emission.

IPC 8 full level  
**H01J 35/02** (2006.01); **A61B 6/00** (2006.01); **A61B 6/14** (2006.01); **H05G 1/26** (2006.01); **H05G 1/34** (2006.01)

CPC (source: EP KR US)  
**A61B 6/00** (2013.01 - EP US); **A61B 6/40** (2013.01 - KR US); **A61B 6/4405** (2013.01 - KR US); **A61B 6/51** (2024.01 - EP US); **A61B 6/512** (2024.01 - KR US); **G01T 1/00** (2013.01 - US); **H01J 35/02** (2013.01 - US); **H01J 35/025** (2013.01 - KR US); **H05G 1/06** (2013.01 - EP US); **H05G 1/12** (2013.01 - EP US); **H05G 1/265** (2013.01 - KR); **H05G 1/34** (2013.01 - EP KR US); **H01J 2235/02** (2013.01 - KR); **H01J 2235/1033** (2013.01 - KR); **H05G 1/085** (2013.01 - EP US)

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- See also references of WO 2017003237A1

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